

**In the specification:**

**Please delete the following paragraph from page 1, lines 9-14:**

--This application claims priority under 35 U.S.C. §119(e) to US Provisional Applications 60/155,007 and 60/211,139 filed September 21, 1999 and June 13, 2000 respectively, the entire disclosure of each of the above-identified applications is incorporated by reference herein.--

**Please replace the disclosure beginning at page 20, line 28 over to page 23, line 7 with the following:**

**--Plastid *codA* with direct *lox* sites.**

The *codA* gene is contained in a *SacI*-*HindIII* fragment. The gene map is shown in Fig. 2. *PrnloxD* (Seq. ID No. 4) is a plastid *rRNA* operon (*rrn16*) promoter derivative. It is contained in a *SacI*-*EcoRI* fragment obtained by PCR using oligonucleotides 5'-GGGGAGCTCGCTCCCCGCCGTCGTTCAATG-3' (SEQ ID NO: 14) and 5'-GGGAATTCATAACTTCGTATAGCATACATTATACGAAGTTATGCTCCAGAAATATAGCCA-3' (SEQ ID NO: 15) as primers and plasmid pZS176 (progenitor of plasmid pZS197; Svab and Maliga 1993) as a template. The promoter fragment *PrnloxD* contains a *lox* site at the 3' end adjacent to the *EcoRI* site. The *EcoRI*-*NcoI* fragment contains the ribosome binding site from plasmid pZS176. The fragment was obtained by annealing the complementary oligonucleotides 5'-AATTCGAAGCGCTTGGATACAGTTGTAGGGAGGGATC-3' (SEQ ID NO: 16) and 5'-CATGGATCCCTCCCTACAACGTATCCAAGCGCTTCG-3' (SEQ ID NO: 17). The *codA* coding region is contained in an *NcoI*-*XbaI* fragment (Serino and Maliga 1997). The *TrbcLloxD* (Seq. ID No. 5) is the *rbcL* 3'-untranslated region contained in an *XbaI*-*HindIII* fragment obtained by PCR using oligonucleotides

5'-GGTCTAGATAACTTCGTATAATGTATGCTATACGAAGTTATAGACAT  
TAGCAGATAAATT-3' (SEQ ID NO: 18) and 5'-  
GGGGGTACCAAGCTTGCTAGATTTTGTATTTCAAATCTTG-3' (SEQ ID NO: 19)  
and plasmid pMSK48 (Khan and Maliga 1999) as template.  
TrbcLloxD contains a lox site adjacent to the XbaI site in  
direct orientation relative to the lox site in the codA 5'UTR.  
The chimeric PrnrnloxD:codA:TrbcLloxD gene was introduced into  
the tobacco plastid transformation vector pPRV111B (Zoubenko  
et al. 1994) as a SacI-HindIII fragment to obtain plasmid  
pSAC48.

**Plastid-targeted nuclear cre linked to a nuclear kanamycin  
resistance gene.** Two plastid targeted nuclear cre genes were  
tested. The cre gene in Agrobacterium binary vector pK027 and  
pK028 encode the CRE recombinase at its N terminus  
translationally fused with the pea Rubisco small subunit (SSU)  
chloroplast transit peptide (Timko et al. 1985) and twenty two  
and five amino acids of the mature Rubisco small subunit,  
respectively. Both cre genes are contained in an EcoRI-HindIII  
fragment. The schematic map of the genes is shown in Fig. 3.  
The P2' Agrobacterium promoter (Velten et al. 1984) (Sequence  
ID. No.9) is contained in an EcoRI-NcoI fragment. The P2'  
promoter fragment was obtained by PCR using oligonucleotides  
5'-ccgaattcCATTTTCACGTGTGGAAGATATG-3' (SEQ ID NO: 20) and 5'-  
cccatggttaggatcctatCGATTTGGTGTATCGAGATTGG-3' (SEQ ID NO: 21)  
as primers and plasmid pHCl (Carrer et al. 1990) as template.  
PCR amplification introduced an EcoRI site at the 5' end and  
ClaI, BamHI and a NcoI sites at the 3' end. A T introduced  
between the ClaI and the BamHI sites eliminates an ATG and  
introduces an in-frame stop codon (Sriraman 2000). The Rubisco  
SSU transit peptides are included in BamHI-NcoI fragments. The  
pK027 fragment (Pea SSU-TP22; Sequence ID No. 7) was obtained  
by using oligonucleotides 5'-CCGGATCCAATTCAACCACAAGAACTAAC-3'  
(SEQ ID NO: 22) and 5'-GGGGCTAGCCATGGCAGGCCACACCTGCATGCAC-3'  
(SEQ ID NO: 23) as primers and plasmid pSSUpGEM4 as the

template (Timko et al. 1985). The pK028 fragment (Pea SSU-TP5; Sequence ID No. 6) was obtained by using oligonucleotides 5'-CCGGATCCAATTCAACCACAAGAACTAAC-3' (SEQ ID NO: 22) and 5'-GGGGCTAGCCATGGTCAATGGGTTCAAATAGG-3' (SEQ ID NO: 24) as primers and plasmid pSSUpGEM4 as the template (Timko et al. 1985). The cre coding region included in a NcoI-XbaI fragment (Sequence ID No. 3) was obtained by PCR amplification using the Cre1 5'-GGGGAGCTCCATGGCTAGCTCCAATTTACTGACCGTACAC-3' (SEQ ID NO: 25) and Cre2 5'-GGGTCTAGACTAATCGCCATCCTCGAGCAGGCGCACCATTGC-3' (SEQ ID NO: 26) oligonucleotides as primers and DNA isolated from *Escherichia coli* strain BNN132 (ATCC number 47059) as template. The presence of cre gene in plant nuclear DNA was confirmed by PCR amplification with the Cre 1 and Cre3 oligonucleotides. The sequence of Cre3 oligonucleotide is 5'-TCAATCGATGAGTTGCTTC-3' (SEQ ID NO: 27). The *Agrobacterium* nos terminator (Tnos) is included in a XbaI-HindIII fragment (Svab et al. 1990). The plastid targeted nuclear cre genes were introduced as EcoRI-HindIII fragments into the pPZP212 *Agrobacterium* binary vectors (Hajdukiewicz et al. 1994) to obtain plasmids pK027 and pK028 with twenty two and five amino acids of the mature Rubisco SSU. A schematic map of the *Agrobacterium* vectors is shown in Fig. 3.--

**Please replace the disclosure at page 35, line 28 over to page 36, line 24 with the following:**

--**Plastid neo gene with inverted lox sites.** The neo gene is contained in a SacI-HindIII fragment. The gene map is shown in Fig. 8. PrnrloxI (Seq. ID No. 1) is a plastid rRNA operon (rrn16) promoter derivative. It is contained in a SacI-XbaI fragment obtained by PCR using oligonucleotides 5'-ggggagctcGCTCCCCGCGTCGTTCAATG-3' (SEQ ID NO: 14) and 5'-ggtctagataacttcgtatagcatatacgaagttatGCTCCCAGAAATATAGCCA-3' (SEQ ID NO: 28) as primers and plasmid pZS176

(progenitor of plasmid pZS197; Svab and Maliga 1993) as a template. The promoter fragment PrnrloxI contains a lox site at the 3' end adjacent to the XbaI site.

The neo coding region is contained in an NcoI-XbaI fragment derived from plasmid pHC62. The neo sequence in plasmid pHC62 is identical with the neo sequence shown in Fig. 28B, US Patent 5,877,402. The EcoRI-NcoI fragment contains the ribosome binding site from plasmid pZS176. The fragment was obtained by annealing the complementary oligonucleotides 5'-AATTCGAAGCGCTTGGATACAGTTGTAGGGAGGGATC-3' (SEQ ID NO: 16) and 5'-CATGGATCCCTCCCTACAACTGTATCCAAGCGCTTCG-3' (SEQ ID NO: 17).

The TrbcLloxI (Seq. ID No. 2) is the rbcL 3'-untranslated region contained in an EcoRI-HindIII fragment obtained by PCR using oligonucleotides 5'-gggaattcataacttcgtatagcatattatacgaagttatAGACATTAGCAGATAAATT-3' (SEQ ID NO: 29) and 5'-gggggtaccaagcttgCTAGATTTTGTATTTCAAATCTTG-3' (SEQ ID NO: 19) and plasmid pMSK48 (Khan and Maliga 1999) as template.

TrbcLloxI contains a lox site adjacent to the EcoRI site in an inverted orientation relative to the lox site in PrnrloxI. The chimeric PrnrloxI:neo:TrbcLloxI gene was introduced into the tobacco plastid transformation vector pPRV111B (Zoubenko et al. 1994)